CHILTON'S GUIDE TO

FUEL INJECTION and FEEDBACK CARBURETORS

Senior Vice President	Ronald A. Hoxter
Publisher and Editor-In-Chief	Kerry A. Freeman, S.A.E.
Executive Editors	Dean F. Morgantini, S.A.E., W. Calvin Settle, Jr., S.A.E.
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COMPUTERIZED ENGINE CONTROL APPLICATIONS

Manufacturer	Year	Engine	SECTION 4 Feedback Carburetor	SECTION 5 Fuel Injection System
American Motors	1980	4 cyl	R-E2SE	—
		6 cyl	C-BBD	—
	1981	4 cyl	R-E2SE	—
		6 cyl	C-BBD	—
	1982	4 cyl	R-E2SE①	—
		6 cyl	C-BBD	—
	1983–85	4 cyl	E2SE	—
		6 cyl	BBD	—
Audi	1978–84	all	—	CIS
	1984–85	all	—	CIS
BMW	1978–82	all	—	AFC③
	1983–85	all	—	AFC③
Buick	See General Motors			
Cadillac	See General Motors			
Chevrolet	See General Motors			
Chrysler	1979–80	4 cyl	H-5220	—
		6 cyl	C-BBD	—
		8 cyl	C-TQ	—
	1981–82	4 cyl	H-6520②	—
		6 cyl	H-6145	—
		8 cyl	C-BBD	—
		8 cyl	—	EFI

AFC—Air Flow Controlled
CIS—Constant Injection System
TBI—Throttle Body Injection
C—Carter carburetor
R—Rochester carburetor
H—Holley carburetor
M—Motorcraft carburetor
EFI—Electronic Fuel Injection
CFI—Central Fuel Injection

① Carter BBD used on engine with CEC system
② Mikuni carburetor on some models
③ CIS on 320i models
④ Holley 6500 on California models
⑤ EFI on Lincoln and Mark IV. Carter thermo quad (TQ) on 4 bbl models
⑥ Digital Fuel Injection on Cadillac models
⑦ Bosch K-Jetronic (KE-Jetronic on 1984 and later models)
⑧ AFC on California; TBI on Federal
⑨ MFI, SFI fuel injection systems on Buick models
⑩ E2SE, E4SE, M2SE or M4SE on carbureted engines
⑪ TBI or MFI on fuel injected engines

EXPLANATION OF TROUBLE CODES GM C-4 AND CCC SYSTEMS

(Ground test lead or terminal AFTER engine is running.)

Trouble Code	Applicable System	Notes	Possible Problem Area
32	C-4, CCC		Barometric pressure sensor (BARO) circuit output low.
32 & 55 (at same time)	C-4		Grounded +8V terminal or V(REF) terminal for barometric pressure sensor (BARO), or faulty ECM computer.
34	C-4	Except 1980 260 cu in. Cutlass	Manifold absolute pressure (MAP) sensor output high (after ten seconds and below 800 rpm).
34	CCC	Including 1980 260 cu in. Cutlass	Manifold absolute pressure (MAP) sensor circuit or vacuum sensor circuit. The engine must run up to five minutes below 800 RPM before this code will set.
35	CCC		Idle speed control (ISC) switch circuit shorted (over ½ throttle for over two seconds).
41	CCC		No distributor reference pulses to the ECM at specified engine vacuum. This code will store in memory.
42	CCC		Electronic spark timing (EST) bypass circuit grounded.
43	C-4		Throttle position sensor adjustment (on some models, engine must run at part throttle up to ten seconds before this code will set).
44	C-4, CCC		Lean oxygen sensor indication. The engine must run up to five minutes in closed loop (oxygen sensor adjusting carburetor mixture), at part throttle and under road load (drive car) before this code will set.

ROCHESTER FEEDBACK CARBURETORS

Model Identification

General Motors Rochester carburetors are identified by their model number. The first number indicates the number of barrels, while one of the last letters indicates the type of choke used. These are V for the manifold mounted choke coil, C for the choke coil mounted on the carburetor, and E for electric choke, also mounted on the carburetor. Model numbers ending in A indicate an altitude-compensating carburetor.

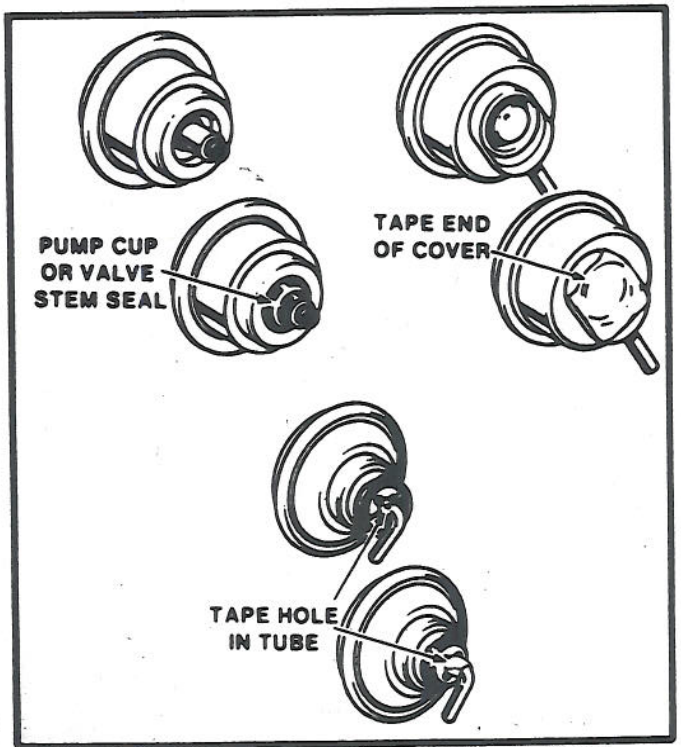
ANGLE DEGREE TOOL

An angle degree tool is recommended by Rochester Products Division, for use to confirm adjustments to the choke valve and related linkages on their late model two and four barrel carburetors, in place of the plug type gauges.

Decimal and degree conversion charts are provided for use by technicians who have access to an angle gauge and not plug gauges. It must be remembered that the relationship between the decimal and the angle readings are not exact, due to manufacturers tolerances.

To use the angle gauge, rotate the degree scale until zero (0) is opposite the pointer. With the choke valve completely closed, place the gauge magnet squarely on top of the choke valve and rotate the bubble until it is centered. Make the necessary adjustments to have the choke valve at the specified degree angle opening as read from the degree angle tool.

NOTE: The carburetor may be off the engine for adjustments. Be sure the carburetor is held firmly during the use of the angle gauge.



Plugging air bleed holes in vacuum break assemblies used on Rochester E2SE feedback carburetors

ANGLE DEGREE TO DECIMAL CONVERSION
Model M2MC, M2ME and M4MC Carburetor

Angle Degrees	Decimal Equiv. Top of Valve	Angle Degrees	Decimal Equiv. Top of Valve
5	.023	33	.203
6	.028	34	.211
7	.033	35	.220
8	.038	36	.227
9	.043	37	.234
10	.049	38	.243
11	.054	39	.251
12	.060	40	.260
13	.066	41	.269
14	.071	42	.277
15	.077	43	.287
16	.083	44	.295
17	.090	45	.304
18	.096	46	.314

ANGLE DEGREE TO DECIMAL CONVERSION
Model M2MC, M2ME and M4MC Carburetor

Angle Degrees	Decimal Equiv. Top of Valve	Angle Degrees	Decimal Equiv. Top of Valve
19	.103	47	.322
20	.110	48	.332
21	.117	49	.341
22	.123	50	.350
23	.129	51	.360
24	.136	52	.370
25	.142	53	.379
26	.149	54	.388
27	.157	55	.400
28	.164	56	.408
29	.171	57	.418
30	.179	58	.428
31	.187	59	.439
32	.195	60	.449

ANGLE DEGREE TO DECIMAL CONVERSION
Model 4MV Carburetor

Angle Degrees	Decimal Equiv. Top of Valve	Angle Degrees	Decimal Equiv. Top of Valve
5	.019	33	.158
6	.022	34	.164
7	.026	35	.171
8	.030	36	.178
9	.034	37	.184
10	.038	38	.190
11	.042	39	.197
12	.047	40	.204
13	.051	41	.211
14	.056	42	.217
15	.060	43	.225
16	.065	44	.231
17	.070	45	.239
18	.075	46	.246
19	.080	47	.253
20	.085	48	.260
21	.090	49	.268
22	.095	50	.275
23	.101	51	.283
24	.106	52	.291
25	.112	53	.299
26	.117	54	.306
27	.123	55	.314
28	.128	56	.322
29	.134	57	.329
30	.140	58	.337
31	.146	59	.345
32	.152	60	.353

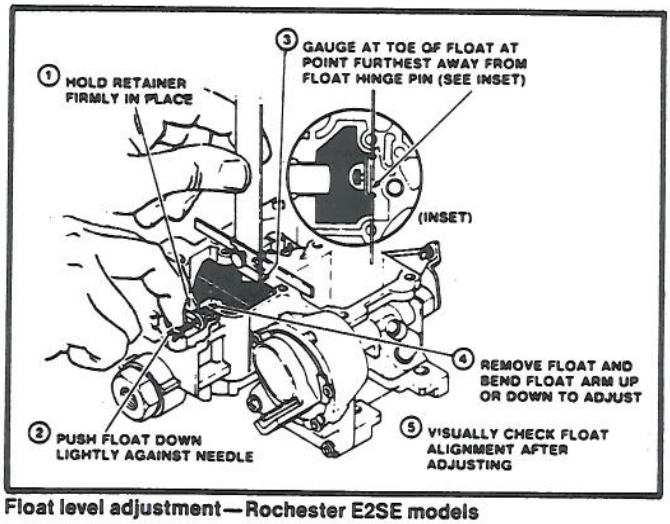
Models 2SE and E2SE

The Rochester 2SE and E2SE Varajet II carburetors are two barrel, two stage down-draft units. Most carburetor components are aluminum, although a zinc choke housing is used on four cylinder engines installed in 1980 models. The E2SE is used both in conventional installations and in the Computer Controlled Catalytic Converter System. In that installation the E2SE is equipped with an electrically operated mixture control solenoid, controlled by the Electronic Control Module. The 2SE and E2SE are also used on the AMC four cylinder in 1980-83.

ADJUSTMENTS

Float Adjustment

1. Remove the air horn from the throttle body
2. Use your fingers to hold the retainer in place, and to push the float down into light contact with the needle.
3. Measure the distance from the toe of the float (furthest from the hinge) to the top of the carburetor (gasket removed).



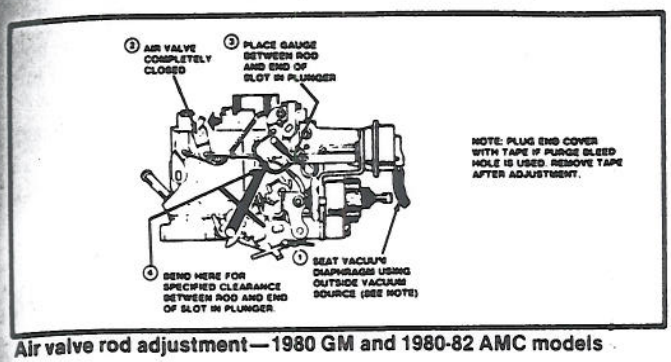
Float level adjustment—Rochester E2SE models

4. To adjust, remove the float and gently bend the arm to specification. After adjustment, check the float alignment in the chamber.

NOTE: Some models have a float stabilizer spring. If used, remove the spring with float. Use care when removing.

Pump Adjustment

1. With the throttle closed and the fast idle screw off the steps of the fast idle cam, measure the distance from the air horn casting to the top of the pump stem.



Air valve rod adjustment—1980 GM and 1980-82 AMC models

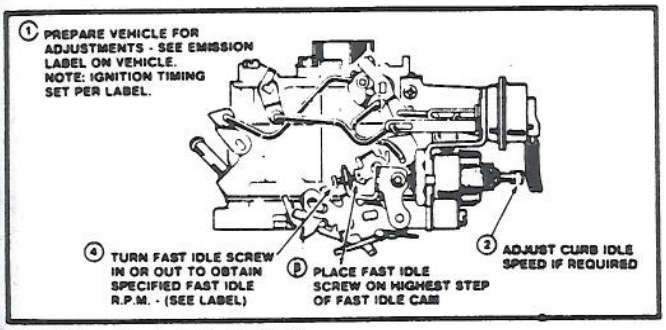
2. To adjust, remove the retaining screw and washer and remove the pump lever. Bend the end of the lever to correct the stem height. Do not twist the lever or bend it sideways.

3. Install the lever, washer and screw and check the adjustment. When correct, open and close the throttle a few times to check the linkage movement and alignment.

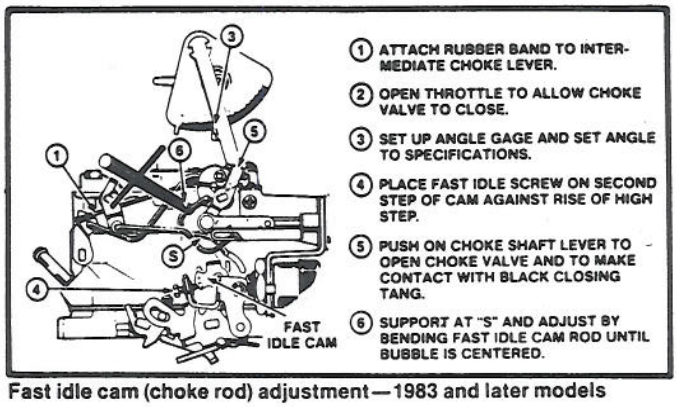
NOTE: No pump adjustment is required on 1981 and later models.

Fast Idle Adjustment

1. Set the ignition timing and curb idle speed, and disconnect and plug hoses as directed on the emission control decal.



Fast idle adjustment—typical



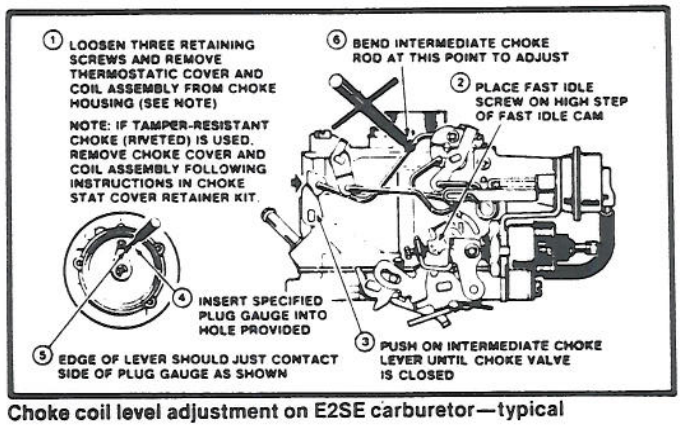
Fast idle cam (choke rod) adjustment—1983 and later models

2. Place the fast idle screw on the highest step of the dam.

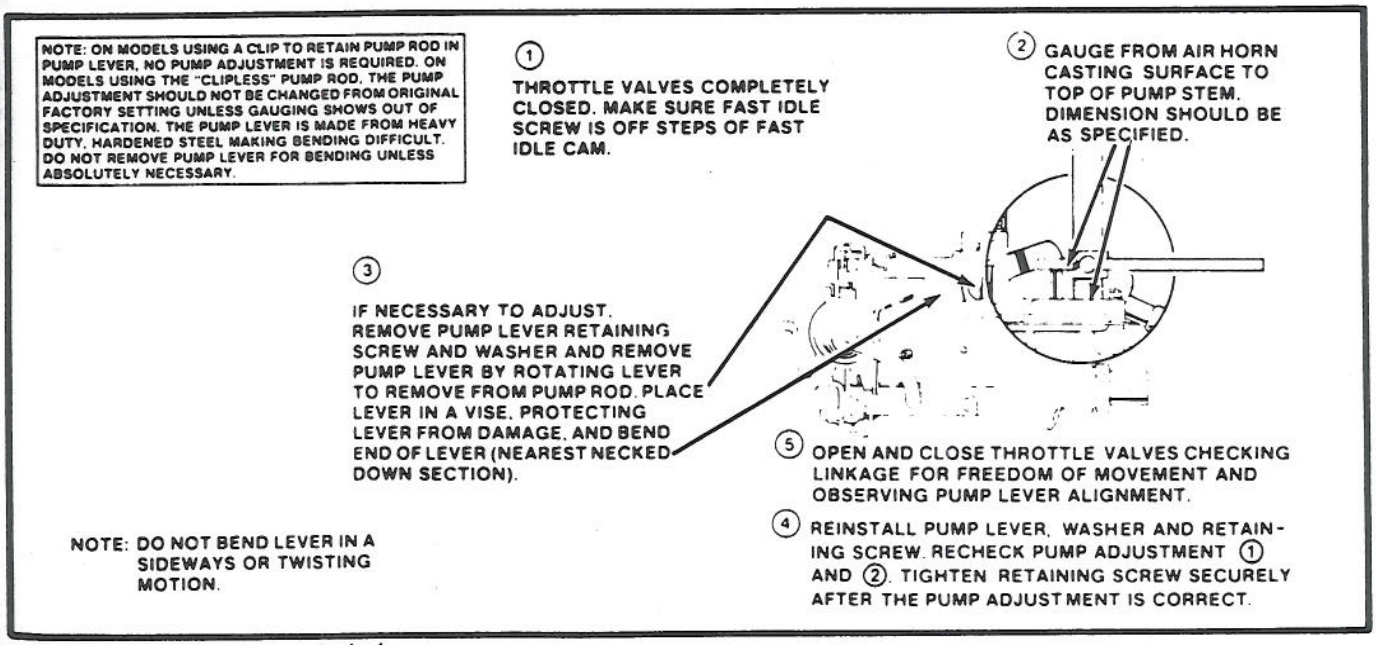
3. Start the engine and adjust the engine speed to specification with the fast idle screw.

Choke Coil Lever Adjustment

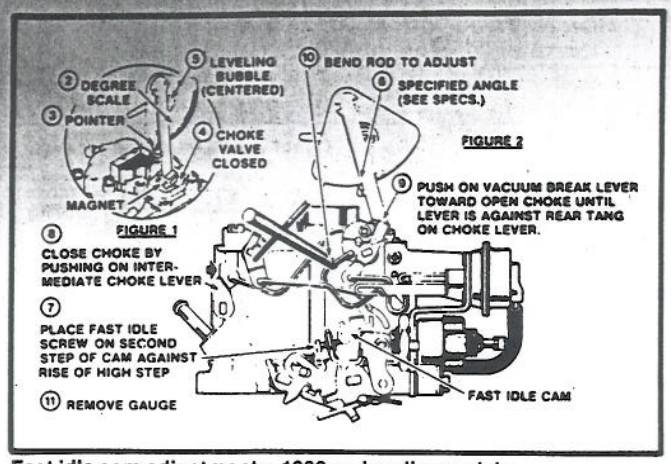
1. Remove the three retaining screws and remove the choke cover and coil. On models with a riveted choke cover, drill out the three rivets and remove the cover and choke coil.



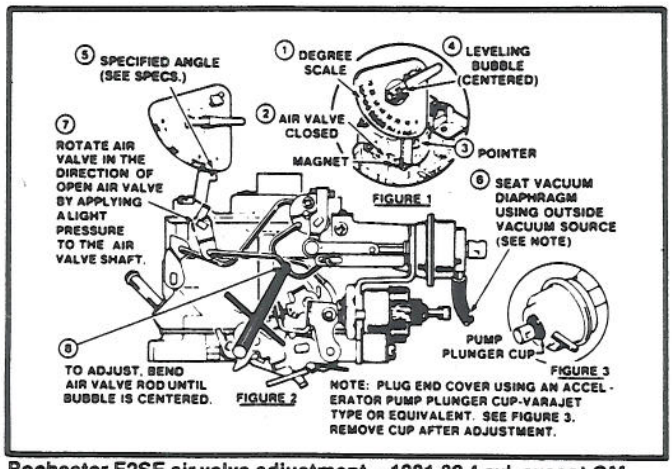
Choke coil level adjustment on E2SE carburetor—typical



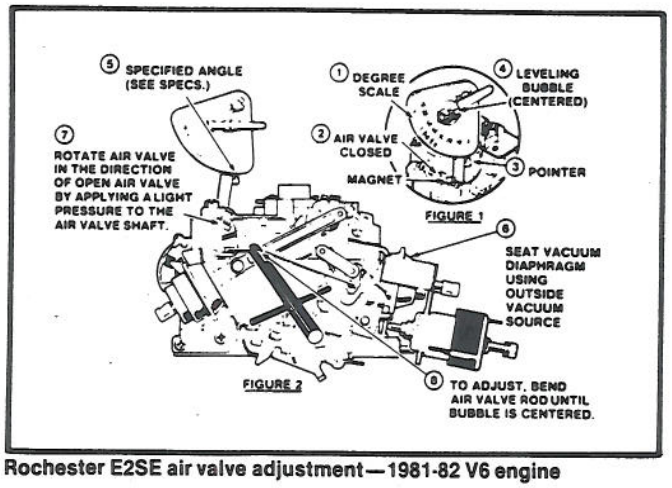
Accelerator pump adjustment—typical



Fast idle cam adjustment—1982 and earlier models



Rochester E2SE air valve adjustment—1981-82 4 cyl. except GM J-body



Rochester E2SE air valve adjustment—1981-82 V6 engine

NOTE: A choke stat cover retainer kit is required for reassembly.

2. Place the fast idle screw on the high step of the dam.

3. Close the choke by pushing in on the intermediate choke lever. On front wheel drive models, the intermediate choke lever is behind the choke vacuum diaphragm.

4. Insert a drill or gauge of the specified size into the hole in the choke housing. The choke lever in the housing should be up against the side of the gauge.

5. If the lever does not just touch the gauge, bend the intermediate choke rod to adjust.

Fast Idle Cam (Choke Rod) Adjustment

1980–82 MODELS

NOTE: A special angle gauge should be used.

1. Adjust the choke coil lever and fast idle first.
2. Rotate the degree scale until it is zeroed.
3. Close the choke and install the degree scale onto the choke plate. Center the leveling bubble.
4. Rotate the scale so that the specified degree is opposite the scale pointer.
5. Place the fast idle screw on the second step of the cam (against the high step). Close the choke by pushing in the intermediate lever.
6. Push on the vacuum break lever in the direction of opening choke until the lever is against the rear tang on the choke lever.
7. Bend the fast idle cam rod at the U to adjust angle to specifications.

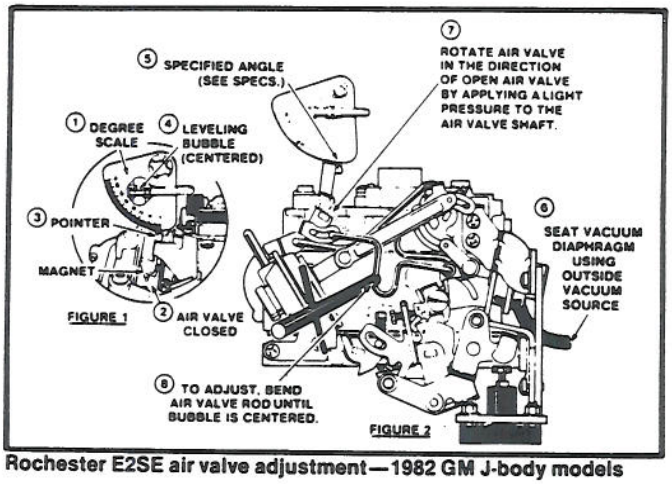
1983–84 MODELS

Refer to the illustration for the adjustment procedure on these models.

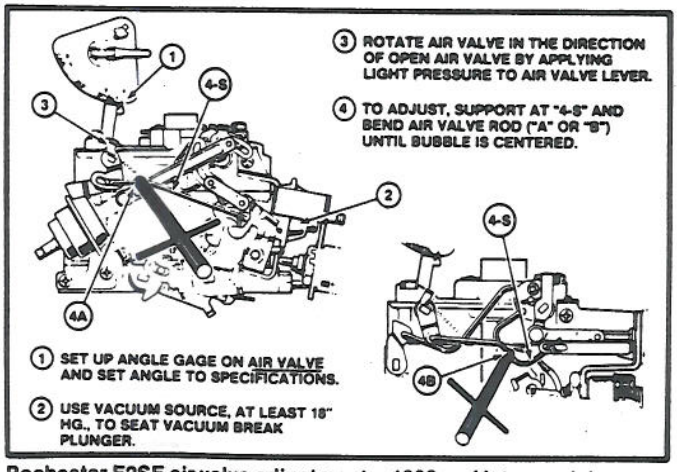
Air Valve Rod Adjustment

1980 MODELS

1. Seat the vacuum diaphragm with an outside vacuum source. Tape over the purge bleed hole if present.
2. Close the air valve.



Rochester E2SE air valve adjustment—1982 GM J-body models



Rochester E2SE air valve adjustment—1983 and later models

3. Insert the specified gauge between the rod and the end of the slot in the plunger on fours, or between the rod and the end of the slot in the air valve on V6s.
4. Bend the rod to adjust the clearance.

1981-82 MODELS

1. Align the zero degree mark with the pointer on an angle gauge.
2. Close the air valve and place a magnet on top of it.
3. Rotate the bubble until it is centered.
4. Rotate the degree scale until the specified degree mark is aligned with the pointer.
5. Seat the vacuum diaphragm using an external vacuum source.
6. On four cylinder models plug the end cover. Unplug after adjustment.
7. Apply light pressure to the air valve shaft in the direction to open the air valve until all the slack is removed between the air link and plunger slot.
8. Bend the air valve link until the bubble is center.

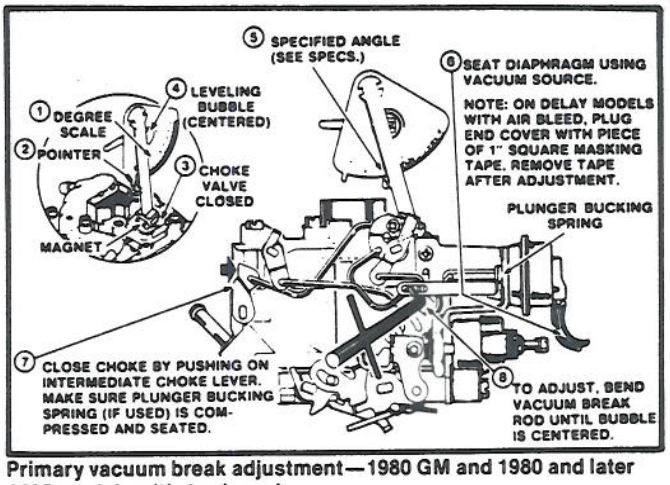
1983-84 MODELS

Refer to the illustration for the adjustment procedure on these models.

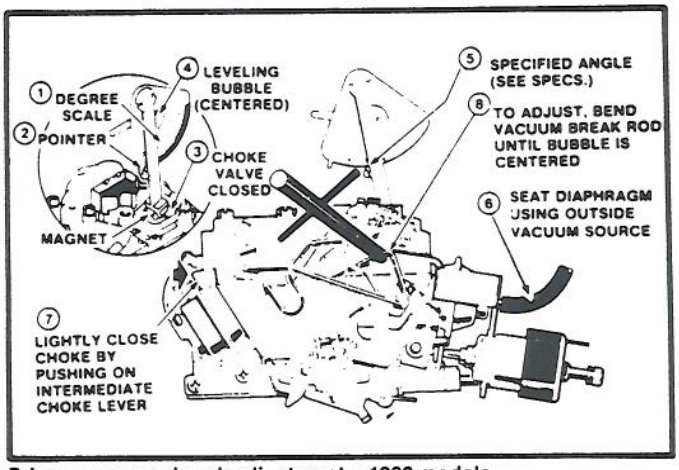
Primary Side Vacuum Break Adjustment

1980 GM MODELS
1980-83 AMERICAN MOTORS

1. Follow Steps 1-4 of the "Fast Idle Cam Adjustment".
2. Seat the choke vacuum diaphragm with an outside vacuum source.
3. Push in on the intermediate choke lever to close the choke valve, and hold closed during adjustment.
4. Adjust by bending the vacuum break rod until the bubble is centered.



Primary vacuum break adjustment—1980 GM and 1980 and later AMC models with 4 cyl. engine



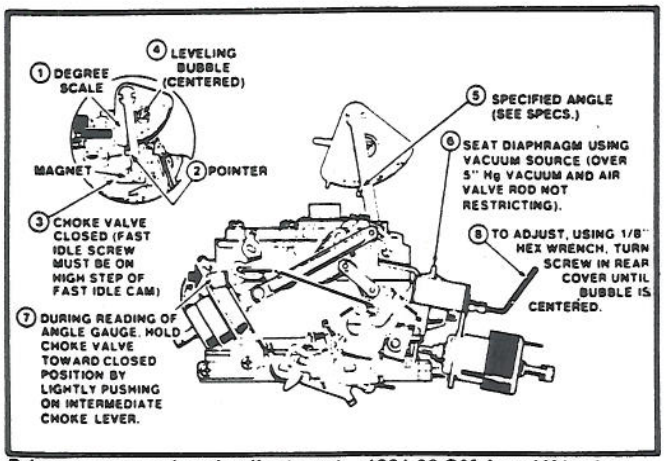
Primary vacuum break adjustment—1980 models

1981-82 GM MODELS

NOTE: Prior to adjustment, remove the vacuum break from the carburetor. Place the bracket in a vise and using the proper safety precautions, grind off the adjustment screw cap then reinstall the vacuum break.

1. Rotate the degree scale on the measuring gauge until the zero is opposite the pointer.
2. Seat the choke vacuum diaphragm by applying an external vacuum source of over 5" vacuum to the vacuum break.

NOTE: If the air valve rod is restricting the vacuum diaphragm from seating it may be necessary to bend the air valve rod slightly to gain clearance. Make an air valve rod adjustment after the vacuum break adjustment.

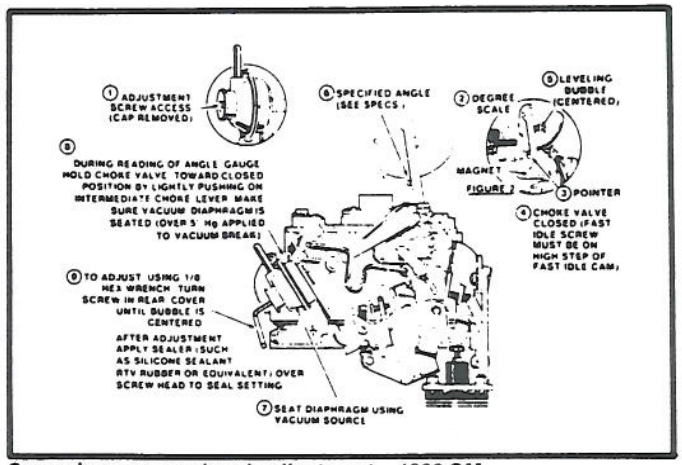


Primary vacuum break adjustment—1981-82 GM A and X-body models with V6

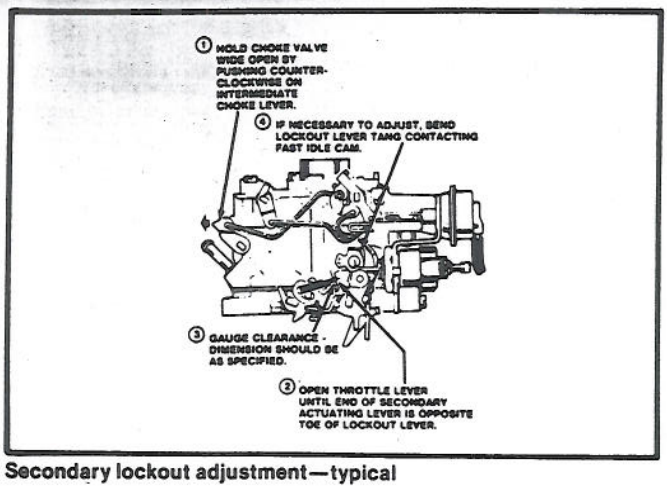
3. Read the angle gauge while lightly pushing on the intermediate choke lever so that the choke valve is toward the close position.
4. Use a 1/8 in. hex wrench and turn the screw in the rear cover until the bubble is centered. Apply a silicone sealant over the screw head to seal the setting.

1983-84 GM MODELS

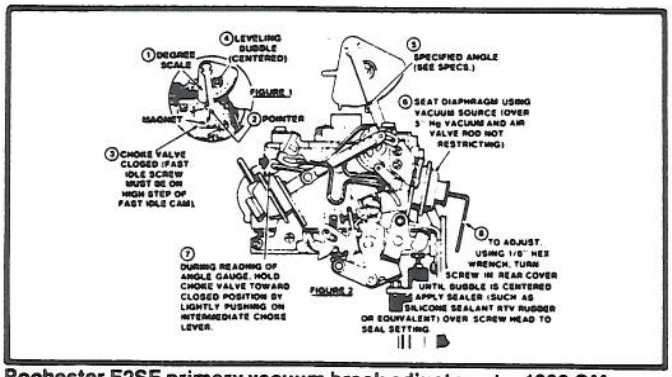
Refer to the illustration for the adjustment procedure on these models.



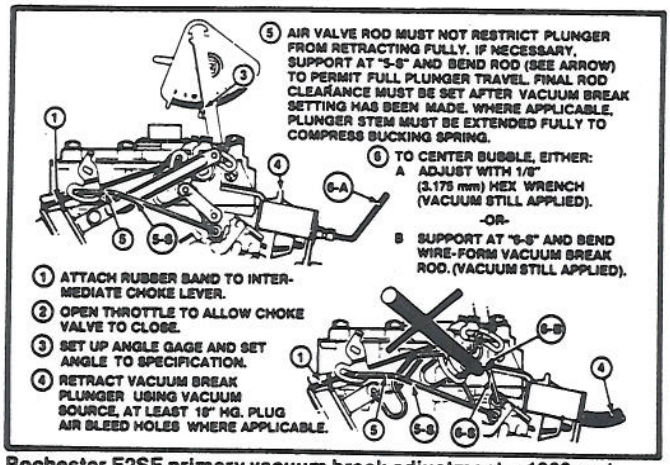
Secondary vacuum break adjustment—1982 GM J-body



Secondary lockout adjustment—typical



Rochester E2SE primary vacuum break adjustment—1982 GM J-body models with 4 cyl. engine



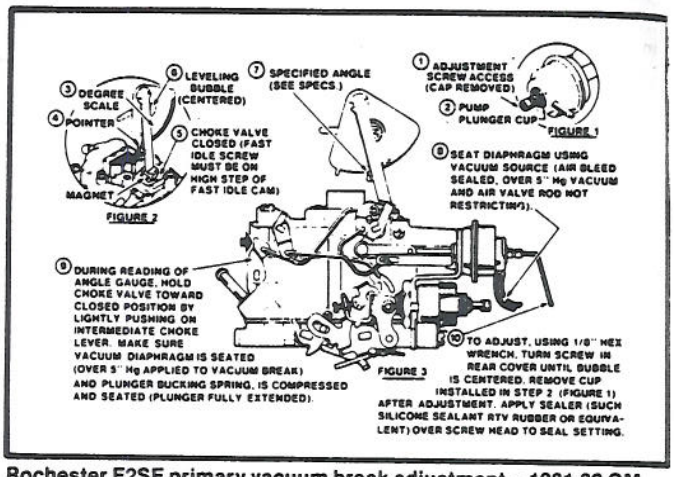
Rochester E2SE primary vacuum break adjustment—1983 and later models

Electric Choke Setting

This procedure is only for those carburetors with choke covers retained by screws. Riveted choke covers are preset and nonadjustable.

1. Loosen the three retaining screws.
2. Place the fast idle screw on the high step of the cam.
3. Rotate the choke cover to align the cover mark with the specified housing mark.

NOTE: The specification "index" which appears in the specification table refers to the mark between "1 notch lean" and "1 notch rich".



Rochester E2SE primary vacuum break adjustment—1981-82 GM A and X-body models with 4 cyl. engine

Secondary Vacuum Break Adjustment

1980 MODELS

This procedure is for V6 installations in front wheel drive models only.

1. Follow Steps 1-4 of the "Fast Idle Cam Adjustment".
2. Seat the choke vacuum diaphragm with an outside vacluum source.
3. Push in on the intermediate choke lever to close the choke valve, and hold closed during adjustment. Make sure the plunger spring is compressed and seated, if present.
4. Bend the vacuum break rod at the U next to the diaphragm until the bubble is centered.

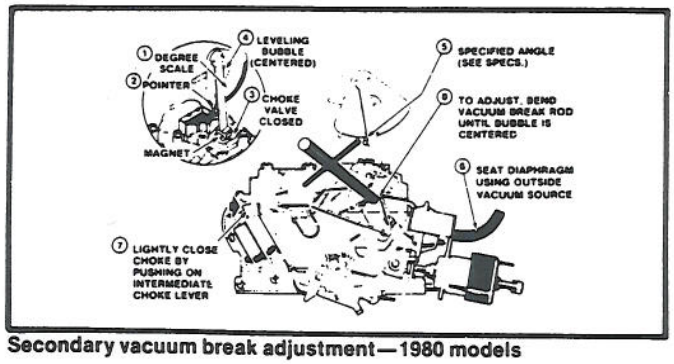
1981-82 GM MODELS

NOTE: Prior to adjustment, remove the vacuum break from the carburetor. Place the bracket in the vise and using the proper safety precautions, grind off the adjustment screw cap then reinstall the vacuum break. Plug the end cover using an accelerator pump plunger cup or equivalent. Remove the cup after the adjustment (A and X series only).

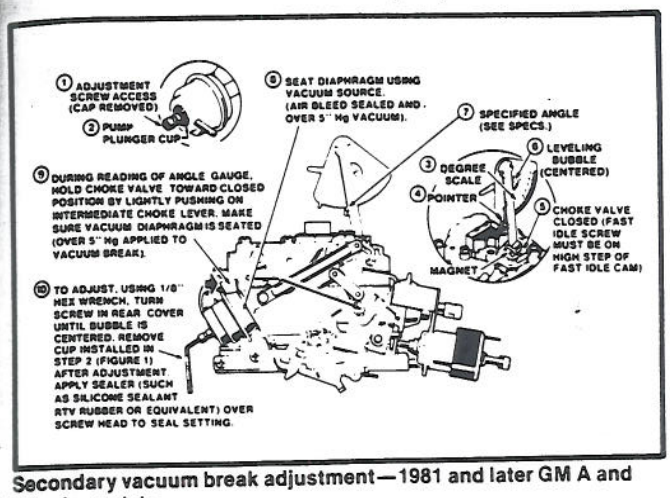
1. Rotate the degree scale on the measuring gauge until the zero is opposite the pointer.
2. Seat the choke vacuum diaphragm by applying an external vacuum source of over 5 in. vacuum to the vacuum break.

NOTE: If the air valve rod is restricting the vacuum diaphragm from seating it may be necessary to bend the air valve rod lightly to gain clearance. make an air valve rod adjustment after the vacuum break adjustment.

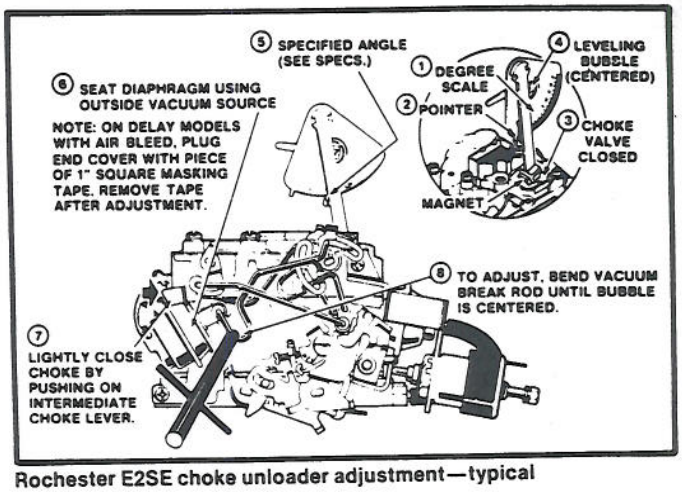
3. Read the angle gauge while lightly pushing on the intermediate choke lever so that the choke valve is toward the close position.
4. Use a 1/8 in. hex wrench and turn the screw in the rear cover until the bubble is centered. Apply a silicone sealant over the screw head to seal the setting.



Secondary vacuum break adjustment—1980 models



Secondary vacuum break adjustment—1981 and later GM A and X-body models



Rochester E2SE choke unloader adjustment—typical

1983-84 GM MODELS

Refer to the illustration for the adjustment procedure on these models.

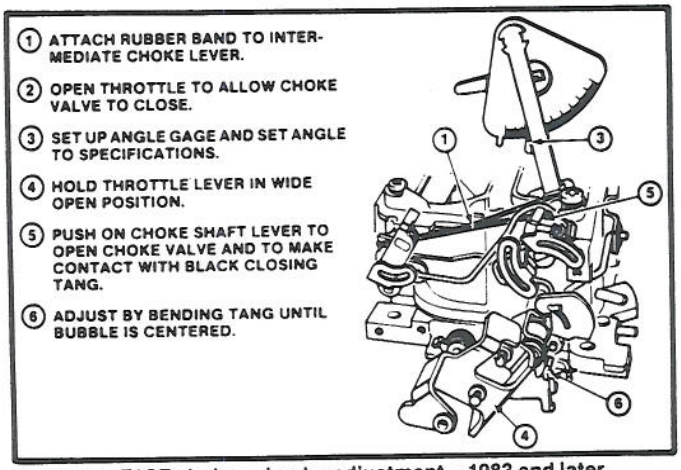
Choke Unloader Adjustment

THROUGH 1982

1. Follow Steps 1-4 of the "Fast Idle Cam Adjustment".
2. Install the choke cover and coil, if removed, aligning the marks on the housing and cover as specified.
3. Hold the primary throttle wide open.
4. If the engine is warm, close the choke valve by pushing in on the intermediate choke lever.
5. Bend the unloader tang until the bubble is centered.

1983-84 MODELS

Refer to the illustration for the adjustment procedure on these models.



Rochester E2SE choke unloader adjustment—1983 and later models

2SE, E2SE CARBURETOR SPECIFICATIONS
American Motors

Year	Carburetor Identification	Float Level (in.)	Pump Rod (in.)	Fast Idle (rpm)	Choke Coil Lever (in.)	Fast Idle Cam (deg./in.)	Air Valve Rod (in.)	Primary Vacuum Break (deg./in.)	Choke Setting (notches)	Choke Unloader (deg./in.)	Secondary Lockout (in.)
'80	17080681	3/16	17/32	2400	.142	18/0.096	.018	20/.110	Fixed	32/.195	N.A.
	17080683	3/16	1/2	2400	.142	18/0.096	.018	20/.110	Fixed	32/.195	N.A.
	17080686	3/16	1/2	2600	.142	18/0.096	.018	20/.110	Fixed	32/.195	N.A.
	17080688	3/16	1/2	2600	.142	18/0.096	.018	20/.110	Fixed	32/.195	N.A.
'81	17081790	0.256	0.128	2600	0.085	25/0.142	.011	19/.103	Fixed	32/.195	0.065
	17081791	0.256	0.128	2400	0.085	25/0.142	.011	19/.103	Fixed	32/.195	0.065
	17081792	0.256	0.128	2400	0.085	25/0.142	.011	19/.103	Fixed	32/.195	0.065
	17081794	0.256	0.128	2600	0.085	25/0.142	.011	19/.103	Fixed	32/.195	0.065
	17081795	0.256	0.128	2600	0.085	25/0.142	.011	19/.103	Fixed	32/.195	0.065
	17081796	0.208	0.128	2400	0.065	25/0.142	.011	19/.103	Fixed	32/.195	0.065
	17081797	0.208	0.128	2600	0.085	25/0.142	.011	19/.103	Fixed	32/.195	0.085
	17081793	0.256	0.128	2400	0.085	25/0.142	.011	19/.103	Fixed	32/.195	0.065

2SE, E2SE CARBURETOR SPECIFICATIONS
American Motors

Year	Carburetor Identification	Float Level (in.)	Pump Rod (in.)	Fast Idle (rpm)	Choke Coil Lever (in.)	Fast Idle Cam (deg./in.)	Air Valve Rod (in.)	Primary Vacuum Break (deg./in.)	Choke Setting (notches)	Choke Unloader (deg./in.)	Secondary Lockout (in.)
'82	17082385	0.256	0.128	2400	0.085	18/.096	2①	21/.117	Fixed	34/.211	0.065
	17082383	0.256	0.128	2400	0.085	18/.096	2①	21/.117	Fixed	34/.211	0.065
	17082380	0.216	0.128	2400	0.085	18/.096	2①	21/.117	Fixed	34/.211	0.065
	17082386	0.125	0.128	2400	0.065	18/.096	2①	19/.103	Fixed	34/.211	0.065
	17082387	0.125	0.128	2600	0.085	18/.096	2①	19/.103	Fixed	34/.211	0.065
	17082388	0.125	0.128	2500	0.085	18/.096	2①	19/.103	Fixed	34/.211	0.065
	17082389	0.125	0.128	2500	0.085	18/.096	2①	19/.103	Fixed	34/.211	0.065
'83–'84	1982380	0.216②	0.128	2500③	0.085	18/.096	2①	21/.117	Fixed	34/.211	0.065
	1983384	0.138	0.128	2700	0.085	18/.096	2①	19/.103	Fixed	34/.211	0.065
	1983385	0.138	0.128	2500	0.085	18/.096	②①	19/.103	Fixed	34/.211	0.065

N.A.: Not Available
① Degrees—see procedure
② Auto. trans.—.138
③ Auto. trans.—2700

2SE, E2SE CARBURETOR SPECIFICATIONS
General Motors—U.S.A.

Year	Carburetor Identification	Float Level (in.)	Pump Rod (in.)	Fast Idle (rpm)	Choke Coil Lever (in.)	Fast Idle Cam (deg./in.)	Air Valve Rod (in.)	Primary Vacuum Break (deg./in.)	Choke Setting (notches)	Secondary Vacuum Break (deg./in.)	Choke Unloader (deg./in.)	Secondary Lockout (in.)
'79	17059674	13/64	1/2	2400	.120	18/0.096	.025	19/.103	2 Rich	—	32/.195	.030
	17059675	13/64	17/32	2200	.120	18/0.096	.025	21/.117	1 Rich	—	32/.195	.030
	17059676	13/64	1/2	2400	.120	18/0.096	.025	19/.103	2 Rich	—	32/.195	.030
	17059677	13/64	17/32	2200	.120	18/0.096	.025	21/.117	1 Rich	—	32/.195	.030
'80	17059614	3/16	1/2	2600	.085	18/.096	.025	17/.090	Fixed	—	36/.227	.120
	17059615	3/16	5/32	2600	.085	18/.096	.025	19/.103	Fixed	—	36/.227	.120
	17059616	3/16	1/2	2600	.085	18/.096	.025	17/.090	Fixed	—	36/.227	.120
	17059617	3/16	5/32	2600	.085	18/.096	.025	19/.103	Fixed	—	36/.227	.120
	17059618	3/16	1/2	2600	.085	18/.096	.025	17/.090	Fixed	—	36/.227	.120
	17059619	3/16	5/32	2600	.085	18/.096	.025	19/.103	Fixed	—	36/.227	.120
	17059620	3/16	1/2	2600	.085	18/.096	.025	17/.090	Fixed	—	36/.227	.120
	17059621	3/16	5/32	2600	.085	18/.096	.025	19/.103	Fixed	—	36/.227	.120
	17059650	3/16	3/32	2600	.085	27/.157	.025	30/.179	Fixed	38/.243	30/.179	.120
	17059651	3/16	3/32	1900	.085	27/.157	.025	22/.123	Fixed	23/.120	30/.179	.120
	17059652	3/16	3/32	2000	.085	27/.157	.025	30/.179	Fixed	38/.243	30/.179	.120
	17059653	3/16	3/32	1900	.085	27/.157	.025	22/.123	Fixed	23/.120	30/.179	.120
	17059714	1 1/16	5/32	2600	.085	18/.096	.025	23/.129	Fixed	—	32/.195	.120
	17059715	11/16	3/32	2200	.085	18/.096	.025	25/.142	Fixed	—	32/.195	.120

2SE, E2SE CARBURETOR SPECIFICATIONS
General Motors—U.S.A.

Year	Carburetor Identification	Float Level (in.)	Pump Rod (in.)	Fast Idle (rpm)	Choke Coil Lever (in.)	Fast Idle Cam (deg./in.)	Air Valve Rod (in.)	Primary Vacuum Break (deg./in.)	Choke Setting (notches)	Secondary Vacuum Break (deg./in.)	Choke Unloader (deg./in.)	Secondary Lockout (in.)
'80	17059716	1 1/16	5/32	2600	.085	18/.096	.025	23/.129	Fixed	—	32/.195	.120
	17059717	1 1/16	3/32	2200	.085	18/.096	.025	25/.142	Fixed	—	32/.195	.120
	17059760	1/8	5/64	2000	.085	17.5/.093	.025	20/.110	Fixed	33/.203	35/.220	.120
	17059762	1/8	5/64	2000	.085	17.5/.093	.025	20/.110	Fixed	33/.203	35/.220	.120
	17059763	1/8	5/64	2000	.085	17.5/.093	.025	20/.110	Fixed	33/.203	35/.220	.120
	17059774	5/32	1/2	①	.085	18/0.096	.018	19/.103	Fixed	—	32/.195	.012
	17059775	5/32	17/32	①	.085	18/0.096	.018	21/.117	Fixed	—	32/.195	.012
	17059776	5/32	1/2	①	.085	18/0.096	.018	19/.103	Fixed	—	32/.195	.012
	17059777	5/32	17/32	①	.085	18/0.096	.018	21/.117	Fixed	—	32/.195	.012
	17080674	3/16	1/2	①	.085	18/0.096	.018	19/.103	Fixed	—	32/.195	.012
	17080675	3/16	1/2	①	.085	18/0.096	.018	21/.117	Fixed	—	32/.195	.012
	17080676	3/16	1/2	①	.085	18/0.096	.018	19/.103	Fixed	—	32/.195	.012
	17080677	3/16	1/2	①	.085	18/0.096	.018	21/.117	Fixed	—	32/.195	.012
'81	17081650	1/4	Fixed	2600	.085	17/.090	1②	25/.142	Fixed	34/.211	35/.220	.012
	17081651	1/4	Fixed	2400	.085	17/.090	1②	29/.171	Fixed	35/.220	35/.220	.012
	17081652	1/4	Fixed	2600	.085	17/.090	1②	25/.142	Fixed	34/.211	35/.220	.012
	17081653	1/4	Fixed	2600	.085	17/.090	1②	29/.171	Fixed	35/.220	35/.220	.012
	17081670	5/32	Fixed	2600	.085	18/.096	1②	19/.103	Fixed	—	32/.195	.012
	17081671	5/32	Fixed	2600	.085	33.5/.207	1②	21/.117	Fixed	—	32/.195	.012
	17081672	5/32	Fixed	2600	.085	18/.096	1②	19/.103	Fixed	—	32/.195	.012
	17081673	5/32	Fixed	2600	.085	33.4/.207	1②	21/.117	Fixed	—	32/.195	.012
	17081740	1/4	Fixed	2400	.085	17/.090	1②	25/.142	Fixed	35/.220	35/.220	.012
	17081742	1/4	Fixed	2400	.085	17/.090	1②	25/.142	Fixed	35/.220	35/.220	.012
'82	17081600	5/16	Fixed	①	③	24/.136	1②	20/.110	Fixed	27/.157	35/.220	③
	17081601	5/16	Fixed	①	③	24/1.36	1②	20/.110	Fixed	27/.157	35/.220	③
	17081607	5/16	Fixed	①	③	24/.136	1②	20/.110	Fixed	27/.157	35/.220	③
	17081700	5/16	Fixed	①	③	24/.136	1②	20/.110	Fixed	27/.157	35/.220	③
	17081701	5/16	Fixed	①	③	24/.136	1②	20/.110	Fixed	27/.157	35/.220	③
	17082196	5/16	Fixed	①	.085	18/.096	1②	21/.117	Fixed	19/.103	27/157	③
	17082316	1/4	Fixed	2600	.085	17/.090	1②	30/.179	Fixed	34/.211	45/.304	③
	17082317	1/4	Fixed	260	.085	17/.090	1②	30/.179	Fixed	35/.220	45/.304	③
	17082320	1/4	Fixed	2800	.085	25/.142	1②	30/.179	Fixed	35/.220	45/.304	③
	17082321	1/4	Fixed	2600	.085	25/.142	1②	30/.179	Fixed	35/.220	45/.304	③
	17082390	13/32	Fixed	2500	.085	17/.090	1②	26/.149	Fixed	34/.211	35/.220	.011–.040
	17082391	13/32	Fixed	2600	.085	25/.142	1②	29/.171	Fixed	35/.220	35/.220	.011–.040
	17082490	13/32	Fixed	2500	.085	17/.090	1②	26/.149	Fixed	34/.211	35/.220	.011–.040
	17082491	13/32	Fixed	2600	.085	25/.142	1②	29/.171	Fixed	35/.220	35/.220	.011–.040
	17082640	1/4	Fixed	2600	.085	17/.090	1②	30/.179	Fixed	34/.211	45/.304	③

2SE, E2SE CARBURETOR SPECIFICATIONS
General Motors—U.S.A.

Year	Carburetor Identification	Float Level (in.)	Pump Rod (in.)	Fast Idle (rpm)	Choke Coil Lever (in.)	Fast Idle Cam (deg./in.)	Air Valve Rod (in.)	Primary Vacuum Break (deg./in.)	Choke Setting (notches)	Secondary Vacuum Break (deg./in.)	Choke Unloader (deg./in.)	Secondary Lockout (in.)
'82	17082641	1/4	Fixed	2400	.085	17/.090	1②	30/.179	Fixed	35/.220	45/.304	③
	17082642	1/4	Fixed	2800	.085	25/.142	1②	30/.179	Fixed	35/.220	45/.304	③
'83	17083356	13/32	Fixed	①	.085	22/.123	1②	25/.142	Fixed	35/.220	30/.179	.025
	17083357	13/32	Fixed	①	.085	22/.123	1②	25/.142	Fixed	35/.220	30/.179	.025
	17083358	13/32	Fixed	①	.085	22/.123	1②	25/.142	Fixed	35/.220	30/.179	.025
	17083359	13/32	Fixed	①	.085	22/.123	1②	25/.142	Fixed	35/.220	30/.179	.025
	17083368	13/32	Fixed	①	.085	22/.123	1②	25/.142	Fixed	35/.220	30/.179	.025
	17083369	13/32	Fixed	①	.085	22/.123	1②	25/.142	Fixed	35/.220	30/.179	.025
	17083370	13/32	Fixed	①	.085	22/.123	1②	25/.142	Fixed	35/.220	30/.179	.025
	17083391	13/32	Fixed	①	.085	28/.164	1②	30/.179	Fixed	35/.220	38/.243	.025
	17083392	13/32	Fixed	①	.085	28/.164	1②	30/.179	Fixed	35/.220	38/.243	.025
	17083393	13/32	Fixed	①	.085	28/.164	1②	30/.179	Fixed	35/.220	38/.243	.025
	17083394	13/32	Fixed	①	.085	28/.164	1②	30/.179	Fixed	35/.220	38/.243	.025
	17083395	13/32	Fixed	①	.085	28/.164	1②	30/.179	Fixed	35/.220	38/.243	.025
	17083396	13/32	Fixed	①	.085	28/.164	1②	30/.179	Fixed	35/.220	38/.243	.025
	17083397	13/32	Fixed	①	.085	28/.164	1②	30/.179	Fixed	35/.220	38/.243	.025
	17083450	1/4	Fixed	①	.085	28/.164	1②	27/.157	Fixed	35/.220	45/.304	.025
	17083451	1/4	Fixed	①	.085	28/.164	1②	27/.157	Fixed	35/.220	45/.304	.025
	17083452	1/4	Fixed	①	.085	28/.164	1②	27/.157	Fixed	35/.220	45/.304	.025
	17083453	1/4	Fixed	①	.085	28/.164	1②	27/.157	Fixed	35/.220	45/.304	.025
	17083454	1/4	Fixed	①	.085	28/.164	1②	27/.157	Fixed	35/.220	45/.304	.025
	17083455	1/4	Fixed	①	.085	28/.164	1②	27/.157	Fixed	35/.220	45/.304	.025
	17083456	1/4	Fixed	①	.085	28/.164	1②	27/.157	Fixed	35/.220	45/.304	.025
	17083630	1/4	Fixed	①	.085	28/.164	1②	27/.157	Fixed	35/.220	45/.304	.025
	17083631	1/4	Fixed	①	.085	28/.164	1②	27/.157	Fixed	35/.220	45/.304	.025
	17083632	1/4	Fixed	①	.085	28/.164	1②	27/.157	Fixed	35/.220	45/.304	.025
	17083633	1/4	Fixed	①	.085	28/.164	1②	27/.157	Fixed	35/.220	45/.304	.025
	17083634	1/4	Fixed	①	.085	28/.164	1②	27/.157	Fixed	35/.220	45/.304	.025
	17083635	1/4	Fixed	①	.085	28/.164	1②	27/.157	Fixed	35/.220	45/.304	.025
	17083636	1/4	Fixed	①	.085	28/.164	1②	27/.157	Fixed	35/.220	45/.304	.025
'84	17072683	9/32	Fixed	①	.085	28/.164	1②	25/.142	Fixed	35/.220	45/.304	.025
	17074812	9/32	Fixed	①	.085	28/.164	1②	25/.142	Fixed	35/.220	45/.304	.025
	17084356	9/32	Fixed	①	.085	22/.123	1②	25/.142	Fixed	30/.179	30/.179	.025
	17084357	9/32	Fixed	①	.085	22/.123	1②	25/.142	Fixed	30/.179	30/.179	.025
	17084358	9/32	Fixed	①	.085	22/.123	1②	25/.142	Fixed	30/.179	30/.179	.025
	17084359	9/32	Fixed	①	.085	22/.123	1②	25/.142	Fixed	30/.179	30/.179	.025
	17084368	1/8	Fixed	①	.085	22/.123	1②	25/.142	Fixed	30/.179	30/.179	.025
	17084370	1/8	Fixed	①	.085	22/.123	1②	25/.142	Fixed	30/.179	30/.179	.025

2SE, E2SE CARBURETOR SPECIFICATIONS
General Motors—U.S.A.

Year	Carburetor Identification	Float Level (in.)	Pump Rod (in.)	Fast Idle (rpm)	Choke Coil Lever (in.)	Fast Idle Cam (deg./in.)	Air Valve Rod (in.)	Primary Vacuum Break (deg./in.)	Choke Setting (notches)	Choke Unloader (deg./in.)	Secondary Lockout (in.)
'84	17084430	11/32	Fixed	①	.085	15/.077	1②	26/.149	Fixed	30/.179	30/.179	.025
	17084431	11/32	Fixed	①	.085	15/.077	1②	26/.149	Fixed	38/.243	42/.277	.025
	17084434	11/32	Fixed	①	.085	15/.077	1②	26/.149	Fixed	38/.243	42/.277	.025
	17084435	11/32	Fixed	①	.085	15/.077	1②	26/.149	Fixed	38/.243	42/.277	.025
	17084452	5/32	Fixed	①	.085	28/.164	1②	25/.142	Fixed	38/.243	42/.277	.025
	17084453	5/32	Fixed	①	.085	28/.164	1②	25/.142	Fixed	35/.220	45/.304	.025
	17084455	5/32	Fixed	①	.085	28/.164	1②	25/.142	Fixed	35/.220	45/.304	.025
	17084456	5/32	Fixed	①	.085	28/.164	1②	25/.142	Fixed	35/.220	45/.304	.025
	17084458	5/32	Fixed	①	.085	28/.164	1②	25/.142	Fixed	35/.220	45/.304	.025
	17084532	5/32	Fixed	①	.085	28/.164	1②	25/.142	Fixed	35/.220	45/.304	.025
	17084534	5/32	Fixed	①	.085	28/.164	1②	25/.142	Fixed	35/.220	45/.304	.025
	17084535	5/32	Fixed	①	.085	28/.164	1②	25/.142	Fixed	35/.220	45/.304	.025
	17084537	5/32	Fixed	①	.085	28/.164	1②	25/.142	Fixed	35/.220	45/.304	.025
	17084538	5/32	Fixed	①	.085	28/.164	1②	25/.142	Fixed	35/.220	45/.304	.025
	17084540	5/32	Fixed	①	.085	28/.164	1②	25/.142	Fixed	35/.220	45/.304	.025
	17084542	1/8	Fixed	①	.085	28/.164	1②	25/.142	Fixed	35/.220	45/.304	.025
	17084632	9/32	Fixed	①	.085	28/.164	1②	25/.142	Fixed	35/.220	45/.304	.025
	17084633	9/32	Fixed	①	.085	28/.164	1②	25/.142	Fixed	35/.220	45/.304	.025
	17084635	9/32	Fixed	①	.085	28/.164	1②	25/.142	Fixed	35/.220	45/.304	.025
	17084636	9/32	Fixed	①	.085	28/.164	1②	25/.142	Fixed	35/.220	45/.304	.025

① See underhood decal
② Measurement in degrees
③ Not available

2SE, E2SE CARBURETOR SPECIFICATIONS
General Motors—Canada

Year	Carburetor Identification	Float Level (In.)	Pump Rod (in.)	Fast Idle (rpm)	Choke Coil Lever (in.)	Fast Idle Cam (deg./in.)	Air Valve Rod (deg.)	Primary Vacuum Break (deg./in.)	Choke Setting (notches)	Secondary Vacuum Break (deg./in.)	Choke Unloader (deg./in.)	Secondary Lockout (in.)
'81	17059660	1/4	17/32	①	.085	24/.136	1	30/.179	Fixed	32/.195	30/.179	②
	17059662	1/4	17/32	①	.085	24/.136	1	30/.179	Fixed	37/.195	30/.179	②
	17059651	1/4	17/32	①	.085	24/.136	1	30/.179	Fixed	32/.195	30/.179	②
	17059666	1/4	17/32	①	.085	24/.136	1	26/.149	Fixed	32/.195	30/.179	②
	17059667	1/4	17/32	①	.085	24/.136	1	26/.149	Fixed	32/.195	30/.179	②
	17059622	5/32	17/32	①	.085	18/.096	1	17/.090	Fixed	—	36/.227	②
	17059623	5/32	17/32	①	.085	18/.096	1	19/.103	Fixed	—	36/.227	②
	17059624	5/32	17/32	①	.085	18/.096	1	17/.090	Fixed	—	36/.227	②

2SE, E2SE CARBURETOR SPECIFICATIONS
General Motors—Canada

Year	Carburetor Identification	Float Level (in.)	Pump Rod (in.)	Fast Idle (rpm)	Choke Coil Lever (in.)	Fast Idle Cam (deg./in.)	Air Valve Rod (deg.)	Primary Vacuum Break (deg./in.)	Choke Setting (notches)	Secondary Vacuum Break (deg./in.)	Choke Unloader (deg./in.)	Secondary Lockout (in.)
'82	17082440	1/4	19/32	①	.085	24/.136	1	30/.179	Fixed	32/.195	45/.304	②
	17082441	1/4	19/32	①	.085	24/.136	1	30/.179	Fixed	32/.195	45/.304	②
	17082443	1/4	19/32	①	.085	24/.136	1	30/.179	Fixed	32/.195	45/.304	②
	17082460	1/4	19/32	①	.085	18/.096	1	21/.117	Fixed	—	36/.227	②
	17082461	1/4	19/32	①	.085	18/.096	1	21/.117	Fixed	—	36/.227	②
	17082462	1/4	19/32	①	.085	18/.096	1	21/.117	Fixed	—	36/.227	②
	17082464	1/8	19/32	①	.085	18/.096	1	21/.117	Fixed	—	36/.227	②
	17082465	1/8	19/32	①	.085	18/.096	1	21/.117	Fixed	—	36/.227	②
	17082466	1/8	19/32	①	.085	18/.096	1	21/.117	Fixed	—	36/.227	②
	17082620	7/16	19/32	①	.085	24/.136	1	30/.179	Fixed	32/.195	45/.304	②
	17082621	7/16	19/32	①	.085	24/.136	1	30/.179	Fixed	32/.195	45/.304	②
	17082622	7/16	19/32	①	.085	24/.136	1	30/.179	Fixed	32/.195	45/.304	②
	17082623	7/16	19/32	①	.085	24/.136	1	30/.179	Fixed	32/.195	45/.304	②
'83	17083311	5/16	Fixed	①	.085	24/.136	1	18/.096	Fixed	20/.110	35/.220	.025
	17083401	5/16	Fixed	①	.085	24/.136	1	18/.096	Fixed	20/.110	35/.220	.025
	17083440	1/4	19/32	①	.085	24/.136	1	28/.164	Fixed	32/.195	40/.260	.025
	17083441	1/4	19/32	①	.085	24/.136	1	28/.164	Fixed	32/.195	40/.260	.025
	17083442	1/4	19/32	①	.085	24/.136	1	28/.164	Fixed	32/.195	40/.260	.025
	17083443	1/4	19/32	①	.085	24/.136	1	28/.164	Fixed	32/.195	40/.260	.025
	17083444	1/4	19/32	①	.085	24/.136	1	28/.164	Fixed	32/.195	40/.260	.025
	17083445	1/4	19/32	①	.085	24/.136	1	28/.164	Fixed	32/.195	40/.260	.025
	17083460	1/4	19/32	①	.085	18/.096	1	19/.103	Fixed	—	36/.227	.025
	17083461	1/4	19/32	①	.085	18/.096	1	18/.096	Fixed	—	36/.227	.025
	17083462	1/4	19/32	①	.085	18/.096	1	19/.103	Fixed	—	36/.227	.025
	17083464	1/8	19/32	①	.085	18/.096	1	19/.103	Fixed	—	36/.227	.025
	17083465	1/8	19/32	①	.085	18/.096	1	20/.110	Fixed	—	36/.227	.025
	17083466	1/8	19/32	①	.085	18/.096	1	19/.103	Fixed	—	36/.227	.025
	17083620	7/16	19/32	①	.085	24/.136	1	28/.164	Fixed	32/.195	40/.260	.025
	17083621	7/16	19/32	①	.085	24/.136	1	28/.164	Fixed	32/.195	40/.260	.025
	17083622	7/16	19/32	①	.085	24/.136	1	28/.164	Fixed	34/.195	40/.260	.025
	17083623	7/16	19/32	①	.085	24/.136	1	28/.164	Fixed	32/.195	40/.260	.025
'84	17084312	5/16	Fixed	①	.085	24/.136	1	18/.096	Fixed	20/.110	35/.220	.025
	17084314	5/16	Fixed	①	.085	29/.171	1	16/.083	Fixed	20/.110	30/.179	.025
	17084480	1/4	Fixed	①	.085	24/.136	1	28/.164	Fixed	32/.195	45/.304	.025
	17084481	1/4	Fixed	①	.085	24/.136	1	28/.164	Fixed	32/.195	45/.304	.025
	17084482	1/4	Fixed	①	.085	24/.136	1	28/.164	Fixed	32/.195	45/.304	.025
	17084483	1/4	Fixed	①	.085	24/.136	1	28/.164	Fixed	32/.195	45/.304	.025
	17084484	1/4	Fixed	①	.085	24/.136	1	28/.164	Fixed	32/.195	45/.304	.025

2SE, E2SE CARBURETOR SPECIFICATIONS
General Motors—Canada

Year	Carburetor Identification	Float Level (in.)	Pump Rod (in.)	Fast Idle (rpm)	Choke Coil Lever (in.)	Fast Idle Cam (deg./in.)	Air Valve Rod (deg.)	Primary Vacuum Break (deg./in.)	Choke Setting (notches)	Secondary Vacuum Break (deg./in.)	Choke Unloader (deg./in.)	Secondary Lockout (in.)
'84	17084485	1/4	Fixed	①	.085	24/.136	1	28/.164	Fixed	32/.195	45/.304	.025
	17084486	1/4	Fixed	①	.085	24/.136	1	28/.164	Fixed	32/.195	45/.304	.025
	17084487	1/4	Fixed	①	.085	24/.136	1	28/.164	Fixed	32/.195	45/.304	.025
	17084620	7/16	Fixed	①	.085	24/.136	1	26/.149	Fixed	32/.195	45/.304	.025
	17084621	7/16	Fixed	①	.085	24/.136	1	26/.149	Fixed	32/.195	45/.304	.025
	17084622	7/16	Fixed	①	.085	24/.136	1	26/.149	Fixed	32/.195	45/.304	.025
	17084623	7/16	Fixed	①	.085	24/.136	1	26/.149	Fixed	32/.195	45/.304	.025

① See underhood decal
② Not available

Secondary Lockout Adjustment

1. Pull the choke wide open by pushing out on the intermediate choke lever.
2. Open the throttle until the end of the secondary actuating lever is opposite the toe of the lockout lever.
3. Gauge clearance between the lockout lever and secondary lever should be as specified.
4. To adjust, bend the lockout lever where it contacts the fast idle cam.

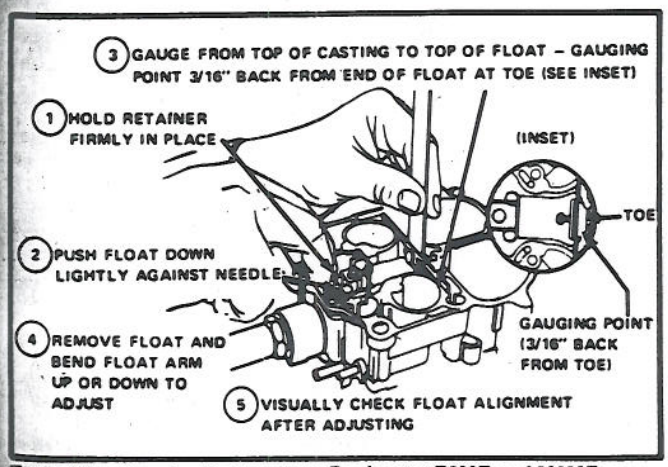
Model E2ME Carburetor

The Dualjet E2ME Model 210 is a variation of the M2ME, modified for use with the Electronic Fuel Control System (also called the Computer Controlled Catalytic Converter, or C-4, System). An electrically operated mixture control solenoid is mounted in the float bowl. Mixture is thus controlled by the Electronic Control Module, in response to signals from the oxygen sensor mounted in the exhaust system upstream of the catalytic converter.

ADJUSTMENTS

Float Level Adjustment

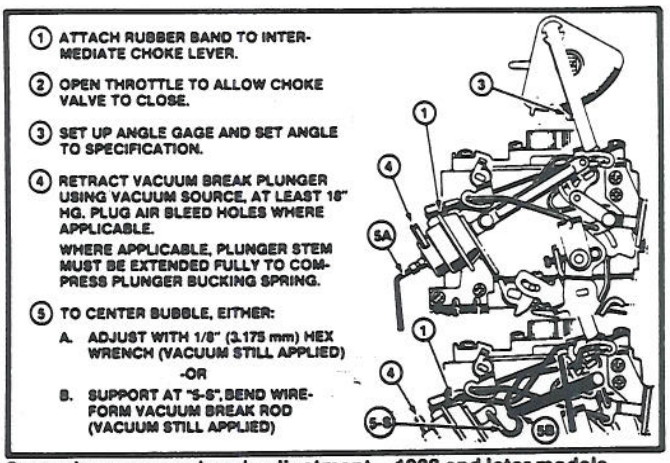
See the illustration for float level adjustment for all carburetors.



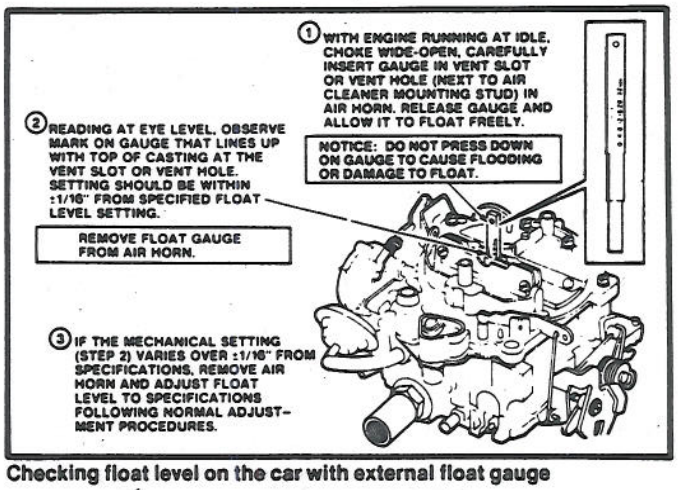
Typical float level adjustment on Rochester E2ME and M2ME models

The E2ME procedure is the same except for adjustment (step 4 in the figure). For the E2ME only, if the float level is too high, hold the retainer firmly in place and push down on the center of the float to adjust.

If the float level is too low on the E2ME, lift out the metering rods. Remove the solenoid connector screws. Turn the lean mixture



Secondary vacuum break adjustment—1983 and later models



Checking float level on the car with external float gauge